REMARKS

Claims 1-7 are pending in this application. By this Amendment, claims 1-7 have been amended. Claim 1 has been amended to clarify the features recited therein and claims 2-7 to correct minor informalities therein. The amendments have no bearing on patentability of, at least, claims 2-5 and 7 as they have no effect on how those claims are interpreted. The rewritten paragraph in the specification at page 7, paragraph [0036] changes the probe reference number 8 to reference number 12 as designated in the drawings. No new matter has been added.

Applicants appreciate the courtesies shown to Applicants' representative by Examiner Masinik in the April 12 personal interview. Applicants' separate record of the substance of the interview is incorporated into the following remarks.

The Office Action alleges that the Information Disclosure Statement (IDS) filed on October 20, 2003 failed to comply with 37 C.F.R. §1.98(a)(3). A statement of relevance was provided for both lined through references. Firstly, paragraphs 6 and 7 of the IDS say reference 3 corresponds to reference 4 and reference 5 corresponds to reference 6 so the base references which were considered provide the relevance. Next, paragraph 2 of the IDS says reference 4 is discussed in the specification, as is reference 6 for that matter, to provide the relevance (see paragraph [0002]). Accordingly, as discussed at the interview, the Information Disclosure Statement filed October 20, 2003, does comply with 37 C.F.R. §1.98(a)(3). Thus, it is respectfully requested that the Examiner consider all references listed in the Information Disclosure Statement filed on October 20, 2003.

Claims 1-7 were rejected under 35 U.S.C. §112, second paragraph. By this Amendment, claims 1-4 and 6 have been amended to provide antecedent basis. As agreed at the interview, claims 1-7 overcome the rejection. Therefore, withdraw of the rejection is respectfully requested.

Claims 1, 3-5, and 7 were rejected under 35 U.S.C. §102(b) as being anticipated by Takei, U.S. Patent No. 5,713,136. The rejection is respectfully traversed.

Applicants' invention of claim 1 calls for a probe driving mechanism for displacement measuring apparatuses for use in measuring the sizes of a workpiece without causing the workpiece to be deformed even when a probe is brought into contact therewith, comprising a motor for driving the probe, a scale for detecting the displacement of the probe, a workpiece sensor for detecting the engagement of the probe with the workpiece, and a device for controlling a power being applied to the motor based on an output from the scale when the output from the scale varies based on the power applied to the motor; making a judgment that the probe contacts the workpiece when the variation of the output from the scale becomes small even though a same level of power continues to be applied to the motor, and then reducing the power being applied to the motor; and controlling the power being applied to the motor based on one of the output from the scale and an output from the workpiece sensor when the output from the work sensor varies. Takei fails to disclose these features.

At the interview, Applicants' representative discussed the differences between the features of claims 1, 3-5, and 7 and the disclosure of Takei. In particular that the Office Action erroneously alleges that Takei shows a device for controlling the power applied to the motor which corresponds to Applicants' device for controlling the power applied to the motor. However, as discussed at the interview, the device used by Takei to control the speed of the motor does not correspond to Applicants' device.

In Takei, the speed of a linear motor is reduced according to the command from a proximity sensor, and the linear motor is stopped by the processing unit as a result of judging that the probe has reached a prescribed measuring load after making contact with the object (col. 2, lines 51-56). As Takei describes in col. 12, lines 6-15 and as shown in Fig. 14, the processing circuit 110 performs a judgment in which it determines whether a prescribed

current value has been reached (Step S3). In the case the prescribed current value has been reached, the processing circuit 110 holds the linear motor as a result of judging that the prescribed measurement load has been reached (Step S4). After holding of the linear motor, the article is measured in accordance with the circuit as shown in Fig. 8 of Takei. As Takei states in the Abstract, "The thrust of the probe is nearly proportional to the drive current supplied to the armature coils, so that the thrust of the probe unit can be controlled before determining the dimensions of the object." Accordingly, Takei is using a prescribed current value to decelerate the speed of the linear motor just before contact with the object being measured. Once the prescribed current value has been reached, the processing circuit 110 holds the linear motor, and after holding the linear motor, the article is then measured. Therefore, Takei controls the motor using a prescribed current value.

As discussed at the interview, Applicants' probe driving mechanism, on the other hand, includes a device for controlling the power being applied to the motor based on the output from the scale when the output from the scale varies. As Applicants described in paragraph [0019], page 4, "When an output from the scale 40 varies in accordance with the power applied to the motor 32, the power applied to the motor 32 in accordance with an output from the scale 40 is controlled. When the variation of an output from the scale 40 becomes small even though the same level of power continues to be applied to the motor 32, a judgement that the probe 12 contacts the workpiece 8 is given, and the power applied to the motor 32 is reduced. To deal with the variation of an output from the work sensor 42, a main board 50 (Fig. 2) including a control circuit for controlling the power, which is applied to the motor 32, in accordance with one of an output from the scale 40 and that from the workpiece sensor 42, the speed variation of which is larger than that of the other,". In other words, the Applicants are controlling the speed of the motor based on the variations of the output from the scale 40 and/or the output from the work sensor 42. Takei fails to perform this function.

Accordingly, Takei does not literally disclose each and every feature of Applicants' claimed invention as recited in claim 1 and the rejection under 35 U.S.C. §102 is inappropriate. Further, for the reasons discussed, Takei does not suggest the features as recited in claim 1.

Because Takei does not anticipate or suggest the features of claim 1, Takei cannot possibly anticipate or suggest the subject matter of claims 3-5, and 7, which depend from claim 1, for the reasons discussed with respect to claim 1 and for the additional features recited therein. It is respectfully requested that the rejection be withdrawn.

Claim 2 was rejected under 35 U.S.C. §103(a) over Takei, as applied to claim 1, and in view of Japanese Patent JP 02-221801A (Mitsutoyo Corporation). The rejection is respectfully traversed.

As discussed at the interview, Mitsutoyo fails to overcome the deficiencies of Takei as applied to claim 1.

Accordingly, neither of the applied references disclose or suggest all of the features recited in claim 1, so they cannot possibly suggest claim 2 for that reason and for the additional features cited. It is respectfully requested that the rejection be withdrawn.

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-7 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,

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Date: May 12, 2005

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